

**INK REPLENISHMENT SYSTEM AND METHOD
FOR A CONTINUOUS FLOW INK JET PRINTER**

ABSTRACT OF THE INVENTION

A system and method for supplying replenishment fluid to an ink tank, wherein the ink tank includes a supply line to supply ink to a nozzle and a return line to receive unused ink. The method comprises the steps of periodically using a control system to recalibrate the ink pressure along the supply line to obtain an optimal print quality; and after the ink pressure has been recalibrated, using the control system to automatically adjust a supply rate of the replenishment fluid to the ink tank, wherein the supply rate of the replenishment fluid is adjusted based on the recalibrated ink pressure.